

WHAT IS CLAIMED IS:

1. A semiconductor apparatus comprising:
a substrate;
an adhesion layer disposed on said substrate, said adhesion layer mainly consisting of semiconductor material;
and
at least one semiconductor thin film including at least one semiconductor device, said at least one semiconductor thin film being bonded on said adhesion layer.
2. The semiconductor apparatus according to claim 1, wherein said substrate is a semiconductor substrate including an integrated circuit.
3. The semiconductor apparatus according to claim 1, further comprising a first interdielectric layer disposed between said substrate and said adhesion layer.
4. The semiconductor apparatus according to claim 3, wherein said first interdielectric layer including at least one of a silicon oxide film and a silicon nitride film.
5. The semiconductor apparatus according to claim 2, wherein said semiconductor thin film is disposed on a region of said substrate adjacent to a region in which said integrated circuit is formed.
6. The semiconductor apparatus according to claim 2, wherein said semiconductor thin film is disposed on a region of said substrate in which said integrated circuit is formed.
7. The semiconductor apparatus according to claim 1, wherein said substrate is an insulating substrate.

8. The semiconductor apparatus according to claim 7, wherein said insulating substrate is made of any of glass, resin, and ceramic materials.
9. The semiconductor apparatus according to claim 7, further comprising an integrated circuit device disposed on said insulating substrate.
10. The semiconductor apparatus according to claim 1, further comprising an electrically conductive layer disposed between said adhesion layer and said semiconductor thin film.
11. The semiconductor apparatus according to claim 1, wherein said adhesion layer is any of a polycrystalline silicon layer and an amorphous silicon layer.
12. The semiconductor apparatus according to claim 2, further comprising an individual interconnecting layer extending from an upper surface of said semiconductor thin film to an upper surface of a terminal area of said integrated circuit so that said semiconductor device and said integrated circuit are electrically connected to each other.
13. The semiconductor apparatus according to claim 12, further comprising a second interdielectric layer which electrically isolates said individual interconnecting layer from said semiconductor thin film and a part of said substrate.
14. The semiconductor apparatus according to claim 13, wherein said second interdielectric layer including at least one of a silicon oxide film and a silicon nitride film.

15. The semiconductor apparatus according to claim 12, further comprising an electrode pad disposed on said first interdielectric layer, said electrode pad being electrically connected to said individual interconnecting layer.

16. The semiconductor apparatus according to claim 1, wherein said semiconductor thin film is a compound semiconductor thin film.

17. The semiconductor apparatus according to claim 1, wherein said semiconductor device is any of a light-emitting element, a light-sensing element, a Hall element, and a piezoelectric element.

18. The semiconductor apparatus according to claim 1, wherein number of said at least one semiconductor device is plural, and a plurality of said semiconductor devices are arranged in said semiconductor thin film at regular intervals.

19. The semiconductor apparatus according to claim 1, wherein number of said at least one semiconductor device formed in said semiconductor thin film is one, number of said at least one semiconductor film is plural, and a plurality of said semiconductor thin films are arranged on said adhesion layer at regular intervals.

21. An optical print head including the semiconductor apparatus of claim 1.

22. The optical print head of claim 21, wherein the semiconductor device in the first thin semiconductor film in the semiconductor apparatus is a light-emitting element, the semiconductor apparatus including a plurality of such light-emitting elements, the optical print head further including:

- a base for supporting the semiconductor apparatus;
- a rod lens array for focusing the light emitted by the light-emitting elements in the semiconductor apparatus;
- a holder for holding the rod lens array; and
- at least one clamp for holding the base and the holder together.

23. An image-forming apparatus comprising at least one optical print head including the semiconductor apparatus of claim 1.

24. The image-forming apparatus of claim 23, further comprising:

- a photosensitive drum selectively illuminated by the optical printing head to form a latent electrostatic image.

25. The image-forming apparatus of claim 24, further comprising:

- a developing unit for supplying toner to develop the latent electrostatic image on the photosensitive drum; and

- a transfer roller for transferring the developed image from the photosensitive drum to printing media.